

ABSTRACT OF THE DISCLOSURE

The present invention relates to an isolated GLRaV-3 protein or polypeptide selected from a group of a polyprotein, a proteinase, a methyltransferase, a helicase, and an RNA-dependent RNA polymerase. The encoding DNA molecule either alone
5 in isolated form or in an expression system, a host cell, or a transgenic grape plant is also disclosed. Another aspect of the present invention relates to a method of imparting grapevine leafroll resistance to grape plants by transforming them with the DNA molecule of the present invention.

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